

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-19. (Canceled)

20. (Currently Amended) A method of forming a thin light polarization film comprising the steps of:

(a) depositing a layer of photoalignable material in an isotropic phase on a substrate,

(b) illuminating the photoalignable layer with actinic radiation to define a principal absorption axis of said photoalignable layer,

(c) applying a thin layer of an isotropic absorber solution onto said photoalignable layer to thereby produce a lyotropic liquid crystal,

(d) partially evaporating said solution to form a gel, and

(e) baking said gel to form an anisotropic absorber layer.

21. (Original) A method as claimed in claim 20 wherein said actinic radiation is linearly polarized and the principal absorption axis of said photoalignable layer is orthogonal to the polarization vector of said actinic radiation.

22. (Original) A method as claimed in claim 20 wherein said actinic radiation is non-polarized and is incident on said photoalignable layer at an oblique angle.

23. (Original) A method as claimed in claim 20 wherein the photoalignable layer is illuminated through a mask whereby only selected regions of said layer are aligned.

24. (Original) A method as claimed in claim 23 wherein the photoalignable layer is illuminated through several masks in sequence whereby different regions of said photoalignable layer may be formed with different alignment axes.

25. (Original) A method as claimed in claim 20 wherein said photoalignable layer is formed with a plurality of pixels.

26. (Original) A method as claimed in claim 25 wherein said pixels include at least two different alignment axes.

27. (Original) A method as claimed in claim 25 wherein all said pixels are formed with the same alignment axis.

28. (Original) A method as claimed in claim 20 wherein said photoalignable layer is illuminated through a photo-patterned mask that transforms linearly polarized or non-polarized actinic radiation into actinic radiation having a spatial distribution of polarization vectors.

29. (Original) A method as claimed in claim 28 wherein said photo-patterned mask is a light polarization mask.

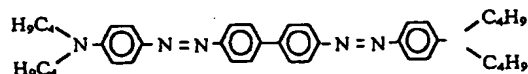
30. (Original) A method as claimed in claim 29 wherein said photo-patterned mask is a birefringence mask.

31. (Currently Amended) A method as claimed in claim 20 wherein more than one absorber material ~~may be~~ is provided and different absorbers are chosen with different colors.

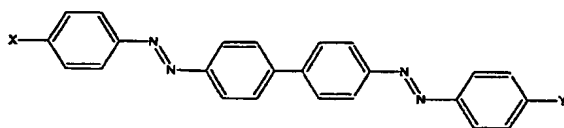
32. (Original) A method as claimed in claim 20 wherein said absorber comprises lyotropic liquid crystal.

33. (Original) A method as claimed in claim 20 wherein said photoalignable material is an organic azodye.

34. (Original) A method as claimed in claim 33 wherein the azodye has the structure:

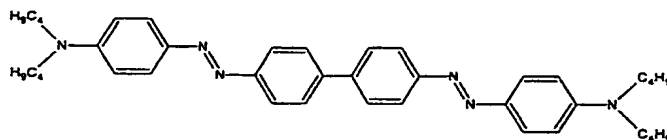


35. (Original) A method as claimed in claim 33 wherein the azodye is selected from the group of dyes having the structures:

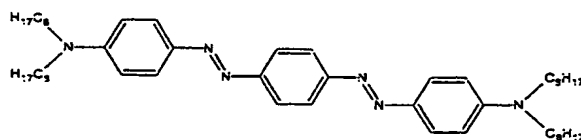


X, Y = -NR, -N(R)₂, -R; where R = Alkyl(C₁-C₁₈)

(1)



(2)



(3)

36. (Original) A method as claimed in claim 20 wherein said photo alignable material is deposited in a layer of from 0.05 to 1.5 μ m thick.

37. (Original) A method as claimed in claim 20 wherein said absorber material has a thickness of from 0.3 to 1.5 μm .

38. (Original) A method as claimed in claim 20 wherein said thin light polarization film is formed on a substrate forming an inner surface of a liquid crystal cell.

39. (Withdrawn) A thin light polarization film deposited on a substrate and comprising a plurality of pixels, wherein said pixels are formed with different axes of polarization.

40. (Withdrawn) A liquid crystal cell comprising a liquid crystal material received within front and rear substrates, wherein an internal surface of one of said substrates is formed with deposited thereon a thin light polarization film as claimed in claim 37.